Complete Summary

GUIDELINE TITLE

Hyperemesis gravidarum.

BIBLIOGRAPHIC SOURCE(S)

Hyperemesis gravidarum. Philadelphia (PA): Intracorp; 2005. Various p. [17 references]

GUIDELINE STATUS

This is the current release of the guideline.

All Intracorp guidelines are reviewed annually and updated as necessary, but no less frequently than every 2 years. This guideline is effective from July 1, 2005 to July 1, 2007.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Hyperemesis gravidarum

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Family Practice
Gastroenterology
Internal Medicine
Nutrition
Obstetrics and Gynecology

INTENDED USERS

Allied Health Personnel
Health Care Providers
Health Plans
Hospitals
Managed Care Organizations
Utilization Management

GUIDELINE OBJECTIVE(S)

To present recommendations for the diagnosis, management, and treatment of hyperemesis gravidarum that will assist medical management leaders to make appropriate benefit coverage determinations

TARGET POPULATION

Pregnant women who have or may have hyperemesis gravidarum

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation

1. Physical examination and assessment of signs and symptoms
2. Diagnostic tests
    - Pregnancy test
    - Urinalysis and test for ketones
    - Serum electrolytes
    - Thyroid and liver function tests

Management/Treatment

1. Intravenous hydration and nothing by mouth (NPO) for 24 hours in cases of persistent vomiting
2. Antiemetic drugs suitable for pregnancy
3. Hospital admission for aggressive management if indicated
4. Correction of electrolyte imbalances
5. Hyperalimentation or enteral nutrition, if necessary
6. Frequent, small, low-fat meals
7. Activity modification as needed
8. Bed rest and close observation if needed
9. Referral to specialists

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Searches were performed of the following resources: reviews by independent medical technology assessment vendors (such as the Cochrane Library, HAYES); PubMed; MD Consult; the Centers for Disease Control and Prevention (CDC); the U.S. Food and Drug Administration (FDA); professional society position statements and recommended guidelines; peer reviewed medical and technology publications and journals; medical journals by specialty; National Library of Medicine; Agency for Healthcare Research and Quality; Centers for Medicare and Medicaid Services; and Federal and State Jurisdictional mandates.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Not Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not stated

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus (Delphi)

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

A draft Clinical Resource Tool (CRT or guideline) is prepared by a primary researcher and presented to the Medical Technology Assessment Committee or the Intracorp Guideline Quality Committee, dependent upon guideline product type.

The Medical Technology Assessment Committee is the governing body for the assessment of emerging and evolving technology. This Committee is comprised of a Medical Technology Assessment Medical Director, the Benefit and Coverage Medical Director, CIGNA Pharmacy, physicians from across the enterprise, the Clinical Resource Unit staff, Legal Department, Operations, and Quality. The Intracorp Guideline Quality Committee is similarly staffed by Senior and Associate Disability Medical Directors.

Revisions are suggested and considered. A vote is taken for acceptance or denial of the CRT.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Diagnostic Confirmation

Subjective Findings

- Nausea and vomiting (hallmark symptoms)
- Tenderness
- Fatigue in abdominal muscles from persistent vomiting (if abdominal pain is reported, other causes of vomiting should be ruled out)
- Dizziness upon standing
- Symptoms of dehydration due to volume depletion:
    - Dry skin
    - Thirst

- Decreased urine output

Objective Findings

- Tachycardia
- Hypotension
- Dry mucous membranes
- Decreased skin turgor
- Weight loss or lack of the appropriate weight gain
- Ketonuria (ketones in the urine)
- Increased urine specific gravity (SG)
- Elevated hematocrit (Hct)
- Elevated blood urea nitrogen (BUN)
- Decreased serum urea level
- Hyponatremia
- Hypokalemia
- Hypochloremia
- Metabolic acidosis
- Elevated liver transaminase levels

Diagnostic Tests

- Pregnancy test, if not already done to confirm pregnancy
- Urinalysis and test for ketones
- Serum electrolytes
- Thyroid and liver function studies

Differential Diagnosis

- Wernicke's encephalopathy (very rare; from vitamin B deficiency)
- Hepatitis
- Appendicitis
- Pyelonephritis
- Uremia
- Twisted ovarian cyst
- Drug toxicity
- Hyperthyroidism
- Central nervous system (CNS) lesions
- Vestibular disorders
- Severe pre-eclampsia
- Hydatiform mole
- Psychiatric disorder

Treatment

Treatment Options

- If vomiting persists, intravenous (IV) hydration and nothing by mouth (NPO) x24 hours
- For nausea, antiemetic drugs suitable for pregnancy (e.g., promethazine [Phenergan], intramuscular (IM) or IV; metoclopramide (Reglan), IM or IV; or

phosphorated carbohydrate solution). Recent studies have shown some efficacy in using methylprednisolone, but as with any pharmacologic agent during pregnancy, benefits need to clearly outweigh the risks.
- If at any time the patient exhibits a decrease in weight, a severe electrolyte imbalance, or failure of outpatient management, hospital admission for more aggressive management is indicated (some women may require repeated hospitalizations).
- Correction of electrolyte imbalances
- Hyperalimentation or enteral nutrition, if there is:
    - Significant percent weight loss
    - Evidence of malnutrition such as decreased cholesterol, decreased albumin. NOTE: Physician advisor should be consulted if treatment plan includes jejunostomy.
- Organize schedule around frequent, small, low-fat meals.
- Activity modification, if activity brings on vomiting
- Women with persistent vomiting require bed rest and close observation, whether as an outpatient or as an inpatient.

Duration of Medical Treatment

- Medical - Optimal: 7 day(s), Maximal: 270 day(s)
    - Medical treatment should continue until vomiting, electrolyte abnormalities, and weight loss resolve.

Additional provider information regarding primary care visit schedules, referral options, and specialty care are provided in the original guideline document.

The original guideline document also provides a list of red flags that may affect disability duration, and return to work goals, including

- Resolving nausea, vomiting without metabolic abnormalities or hospitalization
- After hospitalization for severe metabolic abnormalities, rehydration

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate diagnosis, management, and treatment of hyperemesis gravidarum that assist medical management leaders to make appropriate benefit coverage determinations

POTENTIAL HARMS

Not stated

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2005

GUIDELINE DEVELOPER(S)

Intracorp - Public For Profit Organization

SOURCE(S) OF FUNDING

Intracorp

GUIDELINE COMMITTEE

CIGNA Clinical Resources Unit (CRU)
Intracorp Disability Clinical Advisory Team (DCAT)
Medical Technology Assessment Committee (MTAC)
Intracorp Guideline Quality Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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GUIDELINE AVAILABILITY

Electronic copies: Intracorp guidelines are available for a licensing fee via a password protected, secure Web site at www.intracorp.com.

Reprints of complete guideline content may be purchased for $35.00 per title (plus tax in TX at 8.25% and CT at 1.0%). Please send e-mail request to lbowman@mail.intracorp.com.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Policies and procedures. Medical Technology Assessment Committee Review Process. Philadelphia (PA): Intracorp; 2004. 4 p.
- Online guideline user trial. Register for Claims Toolbox access at www.intracorp.com.

Licensing information and pricing: Available from Intracorp, 1601 Chestnut Street, TL-09C, Philadelphia, PA 19192; e-mail: lbowman@mail.intracorp.com.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on August 18, 2005. The information was verified by the guideline developer on September 2, 2005.

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DISCLAIMER

NGC DISCLAIMER

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